

# Department of Property&Procurement

# Government of the United States Virgin Islands 3274 ESTATE RICHMOND, CHRISTIANSTED, U. S. VIRGIN ISLANDS 00820

8201 SUB BASE, 3RD FLOOR, ST. THOMAS, U. S. VIRGIN ISLANDS 00802 ST. CROIX MAIN OFFICE: 340.773.1561 | ST. THOMAS MAIN OFFICE: 340.774.0828

ST. CROIX FAX: 340.773.0986 | ST. THOMAS FAX: 340.777.9587



## September 9, 2019

TO: Mrs. Lisa Alejandro

Chief Deputy Commissioner Property & Procurement

8201 Sub Base, 3rd Floor Suite 4 St. Thomas, Virgin Islands 00802

FROM: Jonathan P. Tucker

Deputy Director of Technology & Processing

VI Bureau of Internal Revenue 6115 Estate Smith Bay, Suite 225

St. Thomas, VI 00802

SUBJECT: BIR RESPONSE TO QUESTIONS RFP-033-T-2019 (P)

## **VENDOR #1**

### **Technical Questions:**

- 1. RFP section Submission of Proposal
  - a) "Proposals will be received no later than Wednesday, September 18, 2019, @ 4:00 o'clock pm AST." Is there a chance to extend the deadline?

No.

- Final determination for the awarded company will be for this 2019?
   Yes.
- 2. RFP section Contents of the Proposal
  - Project References Please reconsider the notarize written consent requirement. Requesting authorization from our customer will delay the proposal delivery. Vendor will include project reference and include customer contact information.

The DPP will respond to this question.

Cost – There is a difference between the quantity of the copy sets of the Cost proposal (4) and the copy sets of the Proposals (5). The quantity of copies on the Cost proposal is correct?

MEMORANDUM TO DEPARTMENT OF PROPERTY AND PROCUREMENT BIR DATA CENTER UPGRADE RFP QUESTIONS RESPONSE September 9, 2019
PAGE 2 OF 12

The DPP will respond to this question.

Is this RFP only for Saint Thomas Office?
 Yes, the solution will be installed at the BIR's Red Hook Data Center.

## 3. RFP section - Background

a) Information Services Provided to the BIR: The services listed are all the services affected during this upgrade? There are more services that will be impacted and are not included in the list? Does the BIR contemplate this? are they clear other service are not listed and could be affected?

Yes, the BIR will work with current application vendors to ensure that all critical applications are fully functional post-delivery of the Data Center Virtual Environment project.

#### **4.** RFP section – Deliverables

a) BIR is considering time for stabilization between phase 1 and phase 2? If yes, how many days between each phase?

The BIR will allot 72 hours for stabilization, after completing and sign off for User Acceptance Testing (UAT).

- b) The Microsoft Server licenses are OEM or Open License? Migration can be affected depending on the type of license since it will require activation due to hardware change. Do the BIR have any other OS non-Windows that must be converted or migrated? The Microsoft Server licenses are Open License.
- C) Is there any legacy operating system that is in end of life such as Windows Server 2003? The BIR currently uses Windows Server 2008 on all production servers. The BIR plans to upgrade to the latest stable Windows Server version prior to the project kick off.
- d) What version of VMWARE is running on the existing infrastructure? The BIR is currently running VMWare Essentials Plus Version 5 along with VCenter

## **5.** RFP section – Scope of

Work Phase 1

- a) Migrate existing servers: The BIR can provide a full list of servers to be migrated? For each server we need the following information:
  - i. Operating System and OS versions
  - ii. Provide CPU, RAM, and storage per server
  - iii. Applications installed

Services provided by the server

iv. Physical or Virtual Server

The BIR will provide this detail to the selected vendor.

- b) How many virtual servers will be migrated to the new server (V2V)? The BIR requires at maximum twenty (20) virtual to virtual server migrations.
- C) The Migration has physical to virtual (P2V)? How Many?

The BIR requires at maximum five (5) physical to virtual server migrations.

d) Any Virtual Guest or physical server uses a Hardware key for a specific software? Or any software we should know that is attached to hardware specific like MAC address and etc.?

No.

e) All the existing hardware is Intel or there is any hardware in AMD environment? V2V and P2V conversion can cause problems.

All production servers VM or Physical use Intel processors.

f) The BIR can provide the servers infrastructure diagram? The BIR will provide this detail to the selected vendor.

g) Document Systems: The BIR will provide documentation template? What needed to be documented (documentation scope)?

Yes, the BIR will define to the selected vendor.

h) Retire old equipment – Please provide more information about the equipment retirements presumption. Elaborate more on this requirement.

The BIR will define to the selected vendor.

Phase 2

- i) Monitor System: Who is expected to monitor the system? Who will receive the notifications? Who will resolve any detected issue? What will be monitored? The BIR Computer Operations Group will be responsible for monitoring the system. The vendor will be responsible for responding to escalated events.
- j) Data protection and disaster recovery: Please provide more information for the requirements of the DRS solution. In terms of the DRS scope, BIR wants to:
  - Replicate the Backup appliance to the cloud (of site Vaulting)
  - ii. Replicate server to the cloud (virtual 2 virtual)
  - iii. List of servers that the BIR needs to replicate
  - iv. Server Requirements can we assume 30% of the production environment for the sizing of the DRS farm?

The BIR does not have a complete DRS plan currently.

- 6. RFP section Project Planning Stage
  - a) "Check facilities for appropriate power, cooling, and network access": Who is responsible to fix any finding or lack of space?

The BIR will be responsible power, cooling and network access within the BIR Data Center facility.

b) Can the BIR provide precise deliverables on this stage and expected future task on these findings?

The BIR expects the vendor to conduct an opening project meeting. From this meeting, the vendor shall produce a project document

c) It is possible for the BIR to provide the power availability, rack spaces available, etc.?

The BIR Data Center has been upgraded to provide 200 Amps and 120 Volts of clean power. The BIR currently uses a 40 Kw APC UPS to provide 1.5 hours of uptime. The BIR plans to purchase two (2) 42 U, 48-inch-deep server racks.

d) "Confirming hardware/software requirements for all installations": If there is any incompatibility on any software, who is responsible to fix it?

BIR's response to this question will depend on the software and the extent of the incompatibility.

# 7. RFP section – Virtual Server Implementation

a) "This task involves installing VMware vSphere Enterprise Plus on three serves.": On previous section (Deliverables – Phase 2), the BIR is requiring the vSphere Standard – 8 CPUs software (not Enterprise Plus). Can the BIR please clarify if the software required for this project is the vSphere Standard or the vSphere Enterprise Plus? BIR prefers VMware vSphere Enterprise Plus due to the increase functionality offered. The solution calls for four (4) server nodes not three (3).

## 8. RFP section - Virtual Machine Creation

a) The RFP mention creation of new Virtual Machine with Windows server 2016 additional to migration, how many is required?

BIR will provide Windows Server software licensing. The BIR requires a total of twenty (20) virtual Windows servers in the environment. The solution should allow growth up to thirty (30) virtual servers.

# 9. RFP section – Storage and Network Connection

a) The SAN Storage connect via Fiber Channel or ISCSI? If the option is Fiber Channel, there is a SAN switch with available port and does the SAN Switch have ISL TRUNK license? How many switches? It will be High Availability? If ISCSI, do the switch have available port and type. Or the solution has a Cisco UCS 6200/6300 or third-party switch?

The vendor will be required to provide a switch to connect the SAN storage.

# 10. RFP section - Synchronous Replication

- It is required to monitor and provide support during cluster fail?
   BIR will monitor the system and report cluster failure.
- b) Is the RFP only for Saint Thomas office? Or is contemplating Saint Croix or Other regions?

St. Thomas

- C) What are the existing backup software and hardware? The BIR uses VMware snap shots.
- d) The Data protection and site recovery requested solution: what is the total storage space estimate including the new server VM guest? what is the RPO and RTO requested? What is the retention policy locally and offsite? Is archiving required? The Data composite is structured, unstructured or mixed? Has a tool has been run

### on infrastructure to determine deduplication and compression ratio?

RPO is to be determined. RTO is eight (8) hours. The data composition is mixed. No, a tool has not been run to determine duplication and or the compression ratio.

## 11. General questions about the BIR infrastructure and the RFP

a) The BIR network is segmented?

Yes, the BIR LAN has fourteen (14) VLANs as defined below in Table 1:

Table 1: BIR Data Center VLANS

VLAN	DESCRIPTION
1	Management
2	Security
3	VPN
10	Basement
11	Voice
12	Wireless
13	Video
14	SAN
15	Telecheck
16	Time Clock
20	Main Floor
30	Top Floor
40	Old Voice
50	Servers

b) How many VLAN and what are the VLAN overview? (VMotion, Management, Storage, VLan & etc.)

Please see Table 1.

C) What firewall the BIR is using?

The BIR currently uses a FortiGate 200D firewall at the Data Center. The BIR is planning to upgrade to a FortiGate 200E for the outside firewall and add a FortiGate 100F for the inside firewall and FortiSwitch management.

d) What is the Internet existing bandwidth and type of Internet? The internet existing bandwidth is 100Mb via VINGN fiber.

e) Those the BIR has another site connected via (VPN or MPLS) if yes what is the assigned bandwidth?

The BIR has seven (7) sites with three (3) sites connected via MPLS and four (4) sites connected via point to point VPN. The BIR is currently working to restore MPLS connectivity to all seven locations.

f) What device on the Layer 3 (routing) is in the network? Router or a Switch with layer 3? Please provide Brand and Model.

The BIR currently uses a CISCO 3900 series router for Layer 3 routing.

g) Does the network switch (LEAF, Top of RACK or other) on the datacenter has enough port and type to connect the new hardware needs? Yes. MEMORANDUM TO DEPARTMENT OF PROPERTY AND PROCUREMENT BIR DATA CENTER UPGRADE RFP QUESTIONS RESPONSE September 9, 2019 PAGE 6 OF 12

> h) Has the KVM mentioned have enough ports to connect the new equipment and proper cables?

The vendors solution must include must include a KVM with proper port density.

- i) The VCenter will be installed in Window OS or in Vcenter appliance mode? VCenter appliance mode
- Will the ESXI infrastructure use an Independent Windows Standalone DNS exclusively for the VMware Infrastructure or the Windows existing Domain Controller / DNS? It will be deployed with the cluster or independent hardware? ESXI will use existing DC/DNS and will be installed as a cluster.

## 12. RFP section - Contract for Professional Services

a) See Vendor's Legal Department questions/suggestions attached to this letter Draft Contract Questions

## 1. Draft Contract Section 4 - Travel Expenses

Can the travel expenses be "in addition" to the compensation for the Services rather than included in the compensation for the Services?

No.

# 2. Draft Contract Section 8 - Liability of Others

Can provision number 8 be amended and written as follows (similar to contracts with other USVI agencies)?

"Nothing in this Contract shall be construed to impose any liability upon the Government to persons, firms, associations, or corporations engaged by Contractor as servants, agents, or independent contractors, or in any other capacity whatsoever, or make Government liable to any such persons, firms associations, or corporations for the acts, omissions, liabilities, obligations and taxes of Contractor of whatsoever nature, including but not limited to unemployment insurance and social security taxes for Contractor, its servants, agents or independent contractors"

The DPP shall respond to this question.

# 3. Draft Contract Section 10 - Indemnification

Can provision number 10 be amended to state that indemnification should be proportional to the degree of negligence attributable to the Government? We suggest the following language:

"Contractor agrees to indemnify, defend and hold harmless Government from and against any and all loss, damage, liability, claims, demands, detriments, costs, charges and expenses (including attorney's fees) and causes of action of whatsoever character which Government may incur, sustain or be subjected, to the extent that such loss, damage, liability, claims, demands, detriments, costs, charges and expenses and causes of action is caused by the negligent act or omission of Contractor in connection with Contractor's performance of the Services provided hereunder. Nevertheless, any indemnification will be proportional according to the degree of negligenceattributable to the Contractor."

The DPP shall respond to this question.

MEMORANDUM TO DEPARTMENT OF PROPERTY AND PROCUREMENT BIR DATA CENTER UPGRADE RFP QUESTIONS RESPONSE September 9, 2019 PAGE 7 OF 12

## 4. Draft Contract Section 27 - Notice of Federal Funding

Are any federal funds involved in the project?

#### No.

#### 5. Draft Contract Section 28 - Disclaimer of warranties

Can an additional provision be added stating that Vendor disclaims any warranties associated or arising out of the use of items manufactured or licensed by third parties other than Vendor (in example hardware and/or software required for the services)? Vendor suggests the following language:

"Contractor will be required to procure hardware, software and/or other items in order to perform the Services in accordance to the specifications; furthermore (i) Government will subscribe to a separate end user license agreement (EULA) for such software as part of the corresponding addendum; and/or (ii) Contractor will pass through and assign to Government all warranties provided by the manufacturer(s) and/or licensor(s) of such items; provided however that all disclaimers and/or limitations of liabilities relating to such software, hardware or other items will be deemed extended to Contractor."

### The DPP shall respond to this question.

## 6. Draft Contract Section 29 - Confidentiality

Can an additional provision, regarding the confidentiality of the parties' confidential information, be added as number 29? Vendor suggests the following language to protect both parties' confidential information:

### Confidential Information

- a) The parties acknowledge that in the course of their dealings each may receive (the "Receiving Party") Confidential Information of the other party (the "Disclosing Party"). As such, the parties are willing to share such Confidential Information provided that the Receiving Party protects the Confidential Information of the Disclosing Party. Confidential Information will not include information that:
  - 1. Is or becomes generally available to the public without breach of this Contract;
  - 2. Was available to the Receiving Party on a non-confidential basis prior to its disclosure by the Disclosing Party;
  - 3. Becomes available to the Receiving Party from a third party, provided that such third party is not subject to any obligation of confidentiality with the Disclosing Party;
  - 4. Is independently developed by the Receiving Party without reference to or reliance upon the Confidential Information;
  - 5. Is approved by the Disclosing Party for disclosure; or
  - 6. The Receiving Party is required to disclose under legal requirements.
- b) For purposes of this section, the term Confidential Information shall mean all confidential or proprietary data, information, know-how and documentation not generally known to the public and any and all tangible embodiments thereof, including but not limited to, that

which relates to business plans, financial information and projections, agreements with Third Parties, drawings, designs, specifications, estimates, blueprints, plans, data, reports, models, memoranda, notebooks, notes, sketches, artwork, mock-ups, letters, manuals, patents, patent applications, trade secrets, research, products, services, suppliers, customers, markets, software, developments, inventions, processes, technology, Intellectual Property, engineering, hardware configuration, marketing, operations, pricing, distribution, licenses, budgets or finances, and copies of all or portions thereof which in any way related to the business of Contractor or Government, as the case may be, whether or not disclosed, designated or marked as proprietary, confidential or otherwise. Confidential Information will include Contractor's physical security systems, access control systems, and specialized recovery equipment and techniques.

c) In any dispute with respect to these exclusions, the burden of proving that information is not Confidential Information will be on the party making such assertion.

#### Privacy

- and to take all reasonable steps necessary to protect the Confidential Information in confidence unauthorized and/or inadvertent disclosure. Unless in receipt of specific written exemption from the Disclosing Party, the Receiving Party will not:
  - Use, reproduce, modify or disclose any of the Confidential Information for any purpose other than to perform its obligations under this Contract for which the Confidential Information is being disclosed;
  - Disclose any of the Confidential Information other than to representatives of the Receiving Party who have a reasonable need-to-know in order to discharge their obligations under this Contract, and only to do so when the Representatives have agreed to be bound by the confidentiality provisions of this Contract;
  - 3. Remove any proprietary rights legend from the Confidential Information.
- b) The prohibition against the disclosure of Confidential Information includes, but is not limited to, disclosing the substance of the negotiations of the Contract and the existence and/or the terms and conditions thereof, as well as the fact that any similarity exists between the Confidential Information and information independently developed by another person or entity, and the parties understand that such similarity does not excuse it from abiding by its covenant or other obligations under this Contract.
- C) The Receiving Party will be fully liable for the acts of its representatives to whom it discloses the Confidential Information.

The DPP shall respond to this question.

#### **VENDOR #2**

The RFP states that the bid include vSphere Standard (VMW-VCS-STD-3A). and yet on Page 11 and 12 states: "This standard deployment consists of three servers running VMware Enterprise Plus." And also on the scope of work "This task involves installing VMware vSphere Enterprise Plus on three servers." Please clarify which option is required.

The BIR requires VMware Enterprise Plus.

 In Phase One there is a requirement to migrate existing data/Servers from old hardware to new Virtual Servers. Please state how many VM Machines/Virtual Servers need to be migrated.

The BIR requires at maximum twenty (20) virtual to virtual server migrations.

3. In Phase 2 there are potentially many unanswered or uncertain regarding the Monitoring system to report issues via Email or alert mechanism. What Monitoring system does BIR currently use if any?

The BIR intends to use Orion Solar Winds NPM or an equivalent solution to perform the monitoring function.

4. In Phase 2 there is the requirement to allow capacity for Cloud Backup or Asynchronous Replication. To which Backup service will BIR subscribe?

The BIR intends to backup encrypted image files to the Bureau of Information Technology.

5. In regard to the synchronous replication, will the 4 Nodes (Cluster) be physically in the same location?

Yes.

6. The Hyperflex Edge Solution requires an external switch that will allow the datacenter connection to the network. Will BIR include this switch? And if yes, which model switch will be contemplated for this purpose? If not, should the proponent include this switch in the proposal?

The Vendor will be required to provide a switch to connect the solution to the BIR network.

#### VENDOR #3

 Can detail be provided on the number of domains and what the expected goal is for the domain work?

The BIR currently uses a Domain Forest with one root domain and one sub-domain. The Vendor will be responsible for migrating current virtual servers to the new environment.

2. Is there an existing network and rack diagram that can be provided?

The BIR will provide the diagrams to the vendor selected.

3. VmWare 6.0 is EoS on 3/20. Hyperflex M5 comes with VMWare 6.0. Is the BIR open to the responder providing an outsource our managed solution with the BIR having access to the solution?

No

4. Will training be required for any of the requested RFP items?

System administration training will be required.

5. Is there a resource break down per server that can be provided?

Each server must have at least 128GB of Ram and two (2) processors with a minimum of two (2) cores per processor. Ideally each processor should have six (6) to eight (8) cores. The minimum processor speed should be 2.5 GHz Xeon or equivalent.

6. What are the existing power capabilities where the hardware will reside?

The BIR provides a 40 KW 120 V UPS to supply power to the environment. NEMA L6 wall outlets are provided and connected to APC vertical rack mounted PDUs. PDU o

7. Is there sufficient rack and power required build the new hardware in parallel with the old hardware?

Yes.

8. What are the connectivity options available?

This item will be discussed with the winning bidder.

9. Is Cloud Backup bid a requirement for this RFP?

No.

10. What are the requirements that need to be met for the Offsite rented Cloud space? [For example], does it need to reside off island and [how much] storage space [will be] required?

The BIR shall store encrypted files to the Cloud as a Disaster Recovery Solution. The development of the Cloud Solution falls outside of the scope of the RFP; however, the Vendor must consider the BIR's future Cloud backup plan.

11. For the Off-premise solution, would this replace Veeam or be in addition to Veeam?

The BIR shall integrate the solution with Veeam.

12. Need to know the data footprint for the servers included for off premise replication as well as RPO.

The Vendor shall develop the solution to be capable of off premise replication.

13. It says Enterprise Plus here but Standard above.

The BIR requires Enterprise Plus.

14. Will the cluster be added to any existing clusters?

No.

15. What device is the existing production data stored on and how is it connected to the network?

The BIR uses three (3) Dell Equalogic SAN Arrays.

16. What is the expected growth rate for the data?

The expected growth is 16TB per year.

17. Does VC need to be on Windows or can Virtual appliance be used?

The VC should be installed on a Windows or equivalent system. If a Virtual appliance is used, the Vendor must clearly state the benefits to this approach.

18. What make and model are the existing switches that the HCI system will connect to? Is it 10GB capable?

The BIR will share this information with the winning bidder.

19. What will this server be used for?

The server will be used for hosting VC.

20. What application are these 2 physical servers hosting?

The physical servers are used for the Domain Controllers and Windows updates.

21. How much data do these two servers consume?

These servers consume 2TB.

22. What is this private network?

This information will be shared with the winning bidder.

23. Do these servers reside elsewhere?

No.

24. What is the make and model of these 2 servers?

The physical servers are HP Proliant servers.

25. Can you define what is meant by a classic data backup?

Disk to disk or disk to tape.

26. What are the RTO and RPO requirements?

RPO is to be determined. RTO is eight (8) hours.

27. What is the data retention policy?

The retention policy is data specific; therefore, the BIR will discuss this requirement with the winning bidder.

28. Is continuous replication needed or daily?

Daily replication will be required.

29. For the off-site/remote replication, are full server snapshots required?

Full snapshots will be created and backed up to the cloud.

30. Will users need to connect to off-site backups data in the event of a disaster?

System administrators will require access to the off-site backups.

31. What is the Internet connection speed currently available and can it be upgraded?

The connection speed is 100MB and BIR plans to upgrade to 300MB in FY20.